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PRE-APPEAL BRIEF REQUEST FOR REVIEW

	Docket Number (Optional)
	10006.000610

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on _____	10/032,394	12/19/2001
Signature _____	First Named Inventor	
	Adityo Prakash	
Typed or printed name _____	Art Unit	Examiner
	2624	Rosario, Dennis

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
      Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☑ attorney or agent of record.
Registration number ____40,110____.

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

/James K. Okamoto/
——————————————————————
                    Signature

JAMES K. OKAMOTO
——————————————————————
              Typed or printed name

408.436.2110
——————————————————————
                Telephone number

April 20, 2009
——————————————————————
                      Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☑ *Total of ___1___ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: 　　　Adityo Prakash, *et al.* Serial No.: 10/032,394 Filed: December 19, 2001 Title: Adaptive Transforms	Examiner:　　Rosario, Dennis Art Unit: 2624 Atty. Docket No.: 10006.000610

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF

Sir:

　　　　The following provides a focused set of arguments for which a review is being requested. Reference is made to the Advisory Action dated April 1, 2009, the Response to Final filed on March 23, 2009, and the Final Rejection dated January 28, 2009.

Claim Rejections

　　　　Independent claims 2, 3 and 4 each stand rejected under 35 U.S.C. § 103(a) based on Lee 1 (US 6,539,060) in view of Lee 2 (US 5,877,813). The remaining claims are dependent claims are rejected based on either Lee 1 in view of Lee 2, or Lee 1 in view of Lee 2 further in view of an additional citation (Lei et al., or Ostermann, or Etoh, or Avinash).

Focused Argument(s)

A.　　Lee 1 in view of Lee 2 does _not_ disclose or suggest the limitation in the independent claims that "filter coefficients for an interpolation filter are scaled by an inverse of a gradient value."

(1)   Reading the mean value, standard deviation, and local threshold in Lee 2 onto "filter coefficients" is clearly erroneous.

Independent claim 2 expressly recites, "wherein **filter coefficients for an interpolation filter** are scaled by an inverse of a gradient value." The Response to Final discusses the how this claim limitation overcomes the rejection of claim 2 on page 3, line 13 through page 5, line 9. The following provides a summary of the arguments and updates the arguments to respond to further assertions in the Advisory Action.

In rejecting claim 2, the Examiner alleges that m_n and σ_n in equations (2)-(4) of Lee 2 (US 5,877,813) read on the claimed "**filter coefficients** for an interpolation filter." (Final Rejection, page 2, lines 14-18.) However, Lee 2 expressly states, "m_n and σ_n represent a **mean value** and a **standard deviation** of an n-th 8x8 block of the gradient image ..." (Lee 2, col. 4, lines 14-16). Without a doubt, one of ordinary skill in the art at the time of filing knew that filter coefficients are clearly distinguished from a mean value and a standard deviation.

Moreover, there is <u>no</u> disclosure or suggestion in Lee 2 that the mean value and standard deviation are used as "filter coefficients **for an interpolation filter**." The Examiner contends that the average filter 70 in FIG. 2 of Lee 2 reads on "an interpolation filter." (Final Rejection, page 6, lines 10-11.) However, the mean value and standard deviation are used in Lee 2 to define a local threshold value T_n which is calculated and applied by a local edge mapper 40, <u>not</u> by the average filter 70. (Col. 4, lines 1-26.) The Examiner has <u>not</u> made any citation to Lee 2 which shows that the average filter 70 uses filter coefficients which are scaled by the inverse of a gradient value.

The Advisory Action attempts to maintain this untenable interpretation of "filter coefficients" by various statements indicating that he is **broadly** interpreting the claim language. However, broad interpretations of claim language must be at least reasonable to one of ordinary skill in the art at the time of filing. The Examiner's broad interpretations in this case are <u>clearly erroneous</u>.

For example, the Advisory Action states that "Lee 2 teaches using mathematics in said equation (2)-(4) that reasonably includes coefficients, as known to one of ordinary skill in mathematics, operated upon in fig. 2:40 that dictates which filter to use. Thus **broadly** (emphasis added) coefficients in equations (2)-(4) can reasonably be called filter coefficients." (Advisory Action, page 3, lines 2-6.) However, the Examiner provides <u>no</u> support in Lee 2 for his allegation that the local edge mapper 40 "dictates which filter to use." Rather, Lee 2 states, "The local edge mapper 40 produces a local edge map ...." (Col. 3, line 53.) Moreover, one of ordinary skill in the pertinent art at the time of filing knew that "filter coefficients" are applied by a filter and do <u>not</u> "dictate which filter to use."

As another example, the Advisory Action makes the following statement. "Applicants state that the examiner supplies no explanation as to how a mean value and a standard deviation read upon the claimed filter coefficients. The examiner has **broadly** (emphasis added) concluded that any value used for multiplication is a coefficient." (Advisory Action, page 3, lines 7-10.) However, in making this assertion, the Examiner is ignoring the express language of the claims which expressly recites that the coefficients are "<u>filter</u> coefficients <u>for an interpolation filter</u>." (Emphasis added.)

As another example, the Advisory Action asserts, "The examiner has provided a broad interpretation of filter coefficients that read upon the claims and suggest clearly establishing a coefficient that is applied within a filter as Lee 2 shows in fig. 4B and 4C." (Advisory Action, page 3, lines 17-20.) However, while FIGS. 4B and 4C show weight factors for filters, these weight factors have <u>no relation</u> to the mean value, standard deviation, and local threshold which are being read by the Examiner onto the claim language "filter coefficients for an interpolation filter." Rather, FIGS. 4B and 4C relate to average filter 70 and weighted filter 80, while the mean value, standard deviation and local threshold are used by the local edge mapper 40. Hence, applicants respectfully submit that FIGS. 4B and 4C do <u>not</u> provide any support the erroneous assertion that the mean value, standard deviation and local threshold used by the local edge mapper 40 are "filter coefficients for an interpolation filter."

As another example, the Advisory Action asserts, "the threshold as a function of at least three coefficients dictates which filter to use. So indirectly, coefficients are being used to select a filter." (Advisory Action, page 4, lines 2-3.) However, one of ordinary

skill in the pertinent art at the time of filing naturally knew that "filter coefficients for an interpolation filter" are used <u>directly</u> by the interpolation filter itself and do <u>not</u> "select a filter."

(2) Reading the "8" or "1/8" in table 1 of Lee 1 onto "an inverse of a gradient value" is clear error.

Claim 2 expressly recites, "wherein filter coefficients for an interpolation filter are **scaled by an inverse of a gradient value**." (Emphasis added.)

The Final Rejection states, "Lee 1 does not clearly teach an inverse of a gradient value...." (Final Rejection, page 5, line 16.) However, the Examiner changes his mind in the Advisory Action and states, "Upon further review, Lee 1 does broadly teach an inverse of a gradient value: Said '8' or 1/8 of the office action of 1/28/09 on page 5 and corresponding to table 1 of Lee 1 is **broadly** (emphasis added) of a gradient value since gradient values in fig. 8A are operated upon said 1/8 giving for example A/8 where A is a gradient or intensity or pixel value dived [*sic*] by 8. Thus, Lee 2 to cure Lee 1's deficiencies is not really needed. Note that the claims suggest 1/A; however, the claims have not clearly limited A as a denominator."

This newly added argument in the Advisory Action is on its face in clear error. The mere disclosure of the factor of 1/8 in Table 1 does <u>not</u> disclose or suggest "scaling by an inverse of a gradient value." If anything, the factor of 1/8 discloses an inverse of a constant number (in this case, 8), but it does <u>not</u> disclose or suggest "scaling by an inverse of a gradient value."

<div align="center">Conclusion</div>

Thus, as argued above, the rejection of independent claim 2 based on Lee 1 in view of Lee 2 is based upon clear legal and factual deficiencies.

Independent claims 3 and 4 also recite, "filter coefficients for an interpolation filter are scaled by an inverse of a gradient value." Therefore, the rejection of claims 3 and 4 are also in clear error.

The remaining claims depend from either claim 2, 3 or 4 and are rejected based on the rejections of those independent claims. The additional citations do <u>not</u> cure the

deficiencies in Lee 1 in view of Lee 2. As such, the rejection of all pending claims is in clear error.

Reversal of the rejection of all pending claims is respectfully requested by the applicants.

Respectfully submitted,

Adityo Prakash, et al.

Dated: <u>April 20, 2009</u>   By: <u>/James K. Okamoto, Reg. No. 40,110/</u>
James K. Okamoto
Attorney For Applicant(s)
Reg. No. 40,110
OKAMOTO & BENEDICTO LLP
P.O. Box 641330
San Jose, California 95164
(408) 436-2110
(408) 436-2114 (FAX)